

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 OREGON OPERATIONS OFFICE

811 S.W. 6th Avenue Portland, Oregon 97204

March 10, 2006

Mr. Jim McKenna Port of Portland & Co-Chairman, Lower Willamette Group 121 NW Everett Portland, Oregon 97209

Mr. Robert Wyatt Northwest Natural & Co-Chairman, Lower Willamette Group 220 Northwest Second Avenue Portland, Oregon 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240 Food Web Modeling Report: Evaluating Trophic Trace and the Arnot and Gobas Models for Application to the Portland Harbor Superfund Site

Dear Messrs. Wyatt and McKenna:

EPA has completed its review of the document titled, "Food Web Modeling Report: Evaluating Trophic Trace and the Arnot and Gobas Models for Application to the Portland Harbor Superfund Site (Food Web Model Report), dated November 4, 2005. This document was prepared on behalf of the Lower Willamette Group (LWG) by Windward Environmental LLC. The document evaluates two different food web models – TrophicTrace and Arnot and Gobas – to determine which model is most applicable to the Portland Harbor site. The report also considers two different spatial scales and includes a sensitivity and uncertainty analysis to facilitate the identification of data gaps. EPA comments are attached.

EPA would like to recognize the substantial effort and work involved in developing the Food Web Model Report. EPA also generally agrees with the assessment, as presented, that the Arnot and Gobas model is a more appropriate choice for application to this effort, especially considering its enhanced flexibility and transparency relative to TrophicTrace. However, EPA is concerned that the form of the model currently being used does not meet the modeling objectives and specifications previously provided by EPA, including the ability to incorporate temporal variability. The Food Web Model Report also identified a number of issues that must be resolved prior to the next iteration of the Food Web Model. These include developing and linking the food web model to an appropriate contaminant fate and transport model and the identification of the appropriate spatial scale for the food web modeling effort. In addition, it is clear the food web modeling effort would benefit from the incorporation of recently collected data (e.g., benthic invertebrate tissue chemistry and surface water chemistry) and the collection of additional data as described in EPA's December 2, 2005 Data Gaps Memo and February 17, 2006 Round 3 Scope of Work.

Please provide a response to EPA by April 14, 2006 that describes how the issues raised in the attached comments will be addressed. Next Steps for moving forward include reconciling the LWG's modeling objectives with the modeling objectives previously provided by EPA, developing the appropriate integration of the contaminant fate and transport model, and determining the appropriate spatial scale for the modeling effort. Once this is accomplished, the food web model should be re-rerun utilizing recently collected Round 2 data. These steps should take place in time for the food web model serve as a useful tool for finalizing Round 3 data gaps.

Please contact Chip Humphrey at (503) 326-2678 or Eric Blischke (503) 326-4006 if you have any questions. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,

Chip Humphrey Eric Blischke Remedial Project Managers

Greg Ulirsch, ATSDR cc: Rob Neely, NOAA Ted Buerger, US Fish and Wildlife Service Preston Sleeger, Department of Interior Jim Anderson, DEQ Kurt Burkholder, Oregon DOJ Rick Keppler, Oregon Department of Fish and Wildlife Kathryn Toepel, Oregon Public Health Branch Jeff Baker, Confederated Tribes of Grand Ronde Tom Downey, Confederated Tribes of Siletz Audie Huber, Confederated Tribes of Umatilla Brian Cunninghame, Confederated Tribes of Warm Springs Erin Madden, Nez Perce Tribe Rose Longoria, Confederated Tribes of Yakama Nation Valerie Lee, Environment International Keith Pine, Integral Consulting